

18 BEST PRACTICES FOR Power BI

PART 2 OF 3: IMPROVING SPEED

1. **Limit** the number of visuals in dashboards and reports
2. **Remove** unnecessary interactions between visuals
3. Use **on-premises data gateway** instead of Personal Gateway
4. Use **separate gateways** for Power BI service live connection and scheduled data refresh
5. Test custom visuals **before use**
6. **Limit** complex measures and aggregations in data models
7. Use **Star schema** instead of Snowflake schema when possible
8. Use **slicers sparingly**
9. Ensure reports and data sources are in the **same region**
10. Import **only necessary** fields and tables instead of entire data sets
11. Use **templates** (.PBIT files) instead of empty .PBIX files
12. **Reduce** queries
13. **Avoid** bi-directional and many-to-many relationships against high cardinality columns
14. **Avoid** floating point data types
15. Replace the auto-generated date table with a **custom date table**
16. Set `IsAvailableInMdx` to **false** on non-attribute columns
17. **Reduce** the amount of data loaded on page load
18. Use **report backgrounds** for static images

References

Optimization guide for Power BI – Microsoft Corporation, April 2, 2021
Visualizations in Power BI reports – Microsoft Corporation, May 5, 2020
Tips for designing a great Power BI dashboard – Microsoft Corporation, August 14, 2019

Up next:
Part 3
Improving UX